SECTION 200.00 – ACCEPTANCE PROGRAM

SECTION 200.00 – ACCEPTANCE PROGRAM

In order to implement the quality assurance elements outlined in Section 100.00, the Acceptance Program must provide a frequency guide, identify the location, and identify specific quality attributes for sampling and testing. Section 270.00 contains this information for each contract bid item and the ITD Quality Assurance Special Provision (QA SP) has this information for bid items under the QA SP.

Quality control sampling and testing results may be used as part of the acceptance decision provided the following requirements are met:

- The contract must identify a particular specification item as an item for which contractor test results may be used in the acceptance decision.
- The sampling and testing must be performed by qualified laboratories and qualified sampling and testing personnel.
- The quality of the material must be validated by verification sampling and testing performed independent of the quality control samples.
- The quality control sampling and testing must be evaluated by an IA program.

If the results from the quality control sampling and testing are used in the acceptance program, then there must be a dispute resolution system established.

Dispute Resolution System:

When quality control and quality assurance test results conflict and the conflict cannot be resolved, a neutral Dispute Resolution Laboratory will test the material in question. The test results of the Dispute Resolution Laboratory will be considered the final actual test results, replacing the disputed testing for project use.

The ITD Central Laboratory will perform all dispute resolutions unless a potential for conflict of interest exists or the contractor requests an independent laboratory.

200.01 Specifications Compliance and Expenditure of Public Funds. The specifications and plans provide an equitable basis for bidding by contractors. They define the minimum requirements that must be met. The contractor commits to furnishing materials and completed work that will equal or exceed such requirements.

The engineer must be satisfied, through quality assurance measures, that the public is receiving what it is entitled to under the contract. Nothing less should be accepted. To do so is not only a disservice to the state, but would be giving undue advantage to the contractor. Other contractors who bid on the same work could contend that they would have offered a lower bid had they been able to anticipate that materials or work outside of specifications would be accepted.

When payment is made to the contractor for materials furnished and work performed, the duly designated state officials must authorize disbursement of public funds for this purpose. Through the quality assurance program, the Regional/Resident Engineer and the project staff will acquire substantiating data in the form of tests, inspection records and measurements to justify acceptance of the contractor's work. Thus, the engineer can be assured the contractor has fulfilled the contract obligation and is entitled to payment. The engineer furnishes documentation to the officials responsible for authorizing payment.

In case of failure to meet the requirements, the quality assurance program data will constitute the basis for rejection of work deemed unfit for acceptance or it may be the basis for acceptance of the work upon appropriate contract price adjustment where this is permitted under the provisions of the specifications.

Complete records, including tests and inspection reports covering acceptance or rejection of any materials, are kept in the project files while required copies are distributed to other offices as needed for review and documentation. The Regional/ Resident Engineer is responsible for compiling the records to provide a materials inspection summary for each project. Reference Section 400.00, Project Materials Certification, for instructions for compiling the materials inspection summary. The materials inspection summary is used to complete the Materials Certification letter for each project.

SECTION 210.00 – INSPECTION RESPONSIBILITY

Inspection personnel assigned to a project are responsible for the day to day inspection of all portions of the work or materials entering into the work. It is their responsibility to see that all material going into the work has been inspected, tested and approved. Certification of some material is allowed. Reference Section 230.00 for specific directions for accepting material by certification.

Inspection personnel are expected to know which materials must be sampled, when and where samples must be taken, the size of samples required, the proper methods of obtaining samples and methods of field testing.

Diligent inspection of the work in progress and of each successively completed portion is important. There must be assurance that when the work is finished, all parts will be acceptable. No amount of sampling and testing can give this assurance without documented observations at the same time.

210.01 Inspection and Testing at the Project Site. The project inspector must identify and check all materials received on the project before they are incorporated into the work and must ascertain that acceptable test and inspection reports are available for all items inspected by others, as well as project personnel.

Materials that have been inspected by other than project personnel must be reexamined for any damage or contamination that may have occurred subsequently, or for any defects that may not have been observed in the original inspection. Defects or contamination, unless satisfactorily remedied, may be cause for rejection in spite of prior approval.

All materials received on the project without prior inspection and approval are to be inspected by the project inspector and, if required, sampled and tested. The contractor shall be immediately notified if the material has not been inspected and is not approved. If the required tests cannot be made at the project, appropriate samples are to be sent to the District or Central Laboratory for testing. Upon notification of the test results, the material will be approved for use or rejected and the contractor promptly notified. The project inspector must know the appropriate options for disposition of any rejected or failing material and fully document the action taken.

Fabricated items accepted by certification should be visually inspected. See Section 230.00 for additional discussion on products or items accepted by certification.

Along with examining and checking all materials brought onto the job, the inspectors should maintain a continuing visual inspection of the contractor's operations where the materials are handled and incorporated into the work. Any procedures that result in damage or change in any material to the extent that it will fall outside the specification limits should not be permitted to continue and the materials so affected should be rejected or the defects satisfactorily remedied.

210.02 Inspector Safety. Sampling and testing procedures may involve hazardous materials, operations, and equipment. The inspector should be aware of safety hazards and comply with established safety procedures. ITD safety policies reinforce the necessity of protective clothing and equipment when working around construction equipment and machinery. OSHA regulations must be followed for non-ITD personnel on the project site. The contractors are responsible for providing a safe working environment and a safe means of obtaining random samples. ITD has the responsibility of stopping any unsafe operations until corrective action is taken.

When there is a safety concern for the sampler, ITD will allow the contractor, due to familiarity with their equipment or operation, to obtain the sample, however a WAQTC qualified sampler must always observe the sampling.

The sampling and testing technicians must limit the weight of aggregate samples to no more than 40 lb. (18 kg) per sack or bucket.

SECTION 215.00 – MATERIALS OR WORK FAILING SPECIFICATIONS

In case a sample does not meet specification requirements, the options for the material are:

- Rejected or removed when incorporated,
- Accepted with a price adjustment when allowed to remain in place,
- Corrected or remedied by the contractor and re-tested.

Failing material that has not been finally incorporated into the work and can be remedied by further processing may be accepted after having been corrected.

If completed work is found to contain material that is not within specifications, a determination shall be made of the extent of the nonconformance with specifications, the limits of use of non-conforming material, and if it is feasible to be remedied.

The action taken shall be fully documented by the project inspector or tester for the project file by reports, records covering samples, tests, measurements, and corrective action taken if any. The Regional/Resident Engineer is ultimately responsible that disposition of the failing material is fully explained, including justification for acceptance, removal, or price reduction. Reference Standard Specifications Section 105.03.

215.01 Check Tests. Check tests are performed immediately following a failing acceptance test to verify the material does, or does not, meet specifications.

Where appropriate (compaction testing, for example), when a failing test result is verified with a check test, additional testing should be done to define the boundaries of the unacceptable material for corrective treatment.

In all cases, if the check test results indicate the failing test results were caused by a faulty sample or faulty test, record both test results, but add comments to the faulty test data, with appropriate reference to the check test.

Documentation will be made on the field report as to the type of failure, the corrective action taken to get the material back within specifications, and the disposition of the failing material. Include a full explanation of where the failing material was wasted. After corrective treatment, retesting is required to document acceptability.

215.02 Price Adjustments for Non-compliant Materials or Products. There are certain materials as listed below that are subject to price adjustments when laboratory tests indicate the materials have failed the required specifications. All other non-specification material is handled as allowed by the Standard Specifications, Minimum Testing Requirements (Section 270.00) or contract documents.

The magnitude of the price adjustment, expressed as a percentage, will be based on the extent of deviation from the specifications as indicated from test results. The Materials Engineer will determine the price adjustment and notify the District Engineer and the Resident Engineer by interdepartmental memo.

The determined price adjustment percentage will be applied to the quantity of material that is represented by the non-compliant test results. The cost amount of the price adjustment will be calculated by the Resident Engineer's office using the actual invoice cost of the product, excluding freight, from the Contractor. The following materials or products are subject to price adjustments:

- Portland Cement
- Fly Ash
- Waterborne Traffic Line Paint
- Coating Systems (All formulas)
- Liquid Deicer
- Performance Graded Asphalt Binder
- Emulsified Asphalt

SECTION 220.00 – SAMPLING PROCEDURES

Samples will be taken in accordance with the procedures required by the specifications and will be taken concurrently with the project operations or from actual material delivered to the project. When required by the contract, a stratified random method will be used to obtain samples.

The individual taking the sample must have the appropriate WAQTC qualification.

Standard methods of sampling are set forth in the specifications and in this Quality Assurance Manual for nearly all materials. When such standards are not available or specified, the AASHTO Part II Methods of Sampling and Testing will be used as a guide. In these instances, reference should be made to the method employed in obtaining the samples. The District and HQ Materials Section are resources for guidance when a standard method of sampling is not available.

220.01 Sample Size. The required size of a sample for the various tests on a given material is usually stated in the standard method of sampling. These sample sizes should be considered as minimums to avoid any deviation due to sample size alone.

When samples of materials are taken for testing by the ITD District or Central Laboratory, the samples are to be of the prescribed size and shipped in the specified type of container in accordance with Table 220.1. Consulting or independent laboratories may require slightly modified sample containers, however, the samples must be adequately protected and handled to maintain the sample's condition prior to testing.

220.02 Frequency of Sampling. The frequencies at which samples are taken will conform in general to the Minimum Testing Requirements (Section 270.00).

Reliance should not be placed wholly on the results of sampling and testing in determining the acceptability of the materials and construction work. The sampling and testing should be supplemented by sufficient visual inspection of the materials as a whole to ascertain whether the samples and tests are reasonably representative of the entire mass of material. In addition, there should be sufficient observation of the actual construction operations and processes to ascertain whether they can be expected to consistently produce uniform satisfactory results.

220.03 Numbering Samples. Field tests will be numbered consecutively starting with test number 1 for each contract item. Circle failing test numbers on the test result form, along with the failing test result. A check test will be performed and numbered as follows:

> Aggregate Gradation: Perform the check test immediately. If the check test fails, material is considered failing and subject to rejection. Note the location of where failing material is disposed. The sample numbering will continue sequentially with each test and check test because it is a different sample of material that is being tested each time.
>
> Compaction: Perform the check test after there has been additional compaction effort and/or remedial efforts, such as drying out or reprocessing the material. The check test will be taken within 10 ft. (3 m) of the original test and at the same elevation. Add consecutive letters to the original test number (i.e., 2A, 2B, etc.) to indicate a retest of the same material at the same location. Continue retesting until material passes or reject the material and note the location of where failing material is disposed.

220.04 Transporting Flammable and Hazardous Material Samples. The following is general information for reference to more fully comply with the shipping regulations. Local conditions and/or regulations may vary and should be complied with when shipping flammable and/or hazardous materials.

U.S. POSTAL SERVICE - Flammable materials [flashpoint below 101°F (38°C)] cannot be shipped by air mail but can be shipped by surface mail if properly labeled, packaged, and certified. Combustible materials [flashpoint between 101°F (38°C) and 200°F (93°C)] can be shipped by air mail when properly packaged, labeled, and certified.

BUS (GREYHOUND) - All flammable and hazardous materials are prohibited – specifically mentions paints. Includes all flammable, combustible, corrosive, and/or caustic materials.

AIR FREIGHT - Flammable materials can be shipped by most air freight companies but must be properly packaged, labeled, and certified. Need to know exact chemicals involved, flashpoints, etc.

UNITED PARCEL SERVICE - Shipping of flammable materials is allowed under certain conditions depending on the exact chemical and amount. Packages must be labeled with a flammable sticker and a Hazardous Materials label filled out. The information for the Hazardous Materials label can be obtained by:

- Calling UPS and exactly identifying the chemical to be shipped.

OR

- Referring to the UPS handbook, which gives hazard codes, packaging instructions, and certificates required for shipping.

In addition to the foregoing, nuclear densometers and nuclear asphalt content gauges have special shipping requirements. If help is needed in arranging for transportation of these devices, contact the Central Laboratory.

Table 220.1 Materials, Sample Size and Container for Shipping

MATERIAL	MINIMUM SAMPLE SIZE	SAMPLING METHOD	TYPE OF CONTAINER[1]
AGGREGATES:			
Preliminary Base and Surfacing	400 lb. (180 kg)	All aggregates will be sampled according to AASHTO T2 / T248.	
F.A. for Concrete	30 lb. (15 kg)		
C.A. for Concrete	55 lb. (25 kg)		
P.C.C. Pavement Design (Pit Run)	1,500 lb. (700 kg)		
P.C.C. Pavement Design (Crushed)	500 lb. (230 kg) Coarse 300 lb. (140 kg) Fine	Minimum mass of field samples will be based on the maximum nominal size of the aggregates.	Canvas Sacks or 3 1/2 gal. Plastic Buckets
Base Course[2]	80 lb. (35 kg)		
Surface Course	80 lb. (35 kg)		
Cover Coat Material	60 lb. (30 kg)		
Mineral Filler	25 lb. (10 kg)	Samples for quality testing should be at least 60 lb. (27 kg).	
Special Backfill	60 lb. (30 kg)		
Borrow & Granular Borrow	60 lb. (30 kg)		
Blotter	30 lb. (15 kg)	No single sack of aggregate shall contain more than 40 lb. (18 kg).	
PLANT MIX JOB MIX FORMULA (Submitted by the Contractor for Confirmation)	150 lb. (68 kg) coarse & fine aggregates according to percents of job mix formula		
	8 individual qt. (liters) of PG binder	AASHTO T40	Screw Top Can
PLANT MIX & ROAD MIX	16 lb. (8 kg)	AASHTO T168 (Plate Method)	Cardboard Box 10" x 9" x 6" (250 mm x mm x 15 mm)
ASPHALTS:			
PG Binder	Approximately 1 qt. (1 L)	AASHTO T40	Screw Top Can
Liquid Asphalts	Approximately 1 qt. (1 L)	AASHTO T40	Screw Top Can
Emulsified Asphalts	Approximately 1 qt. (1 L)	AASHTO T40	Plastic Jar
Anti-Strip Additive	4 oz. (120 ml)		Glass or Plastic Bottle
Building Blocks	6 Units		Bundle and Tie, Protected from Breakag
Building Bricks	10 Units		Bundle and Tie, Protected from Breakag
CONCRETE:			
Cement/Flyash/Silica Fume	1 gal. (4 L)	AASHTO T127	Plastic Wide Mouth or Cylinder Can
Cylinders	Set of 3	AASHTO T23	Cylinder Cans
Curing Compound	1 qt. (1 L)	Idaho T7	Metal Screw Top or Friction Top Can
Water	1 gal. (4 L)	AASHTO T26	Plastic
Concrete for Chlorides	15 grams pulverized	Idaho T128	20-Gram Plastic Vial

Table 220.1 Materials, Sample Size and Container for Shipping (Continued)

GLASS BEADS	1- 50 lb (22.7Kg) Sack		Sack
JOINT MATERIAL	24 in. (600 mm) x full width		
LIME	1 gal. (4 L)	AASHTO T218	Metal or Plastic
METALS:			
Reinforcing Steel (All Grades, All Sizes)	Two - 36 in. (900 mm)	Field sample from shipments delivered to project. See Section 230.03.02	
Dowel Bars for Transverse Joints in Concrete Pavement	Two – Special cut by the supplier- Approximately 36 in. (900 mm)		
Tie Bars for Longitudinal Joints in Concrete Pavement	Two - At least 30 in. (750 mm)		
Prestressing Reinforcement	60 in. (1.5 m) Length each heat number		Ship Straight (do not kink or bend)
Welded Wire Fabric	24 in. (600 mm) Square		Ship Flat
PAINT – waterborne	1 qt. (1 L)	Idaho T138	Plastic Screw Top Can or Lined Metal Friction Top Can
Solvent	1 qt. (1 L)	Idaho T7	Metal Friction Top Can
PIPE:			
Galvanized Coating (Steel Sheet)	2 in. (50 mm) Square	AASHTO M 36	Cardboard Box
SALT	10 lb. (4.5 kg)	ASTM D632	Plastic Wide Mouth or Cylinder Can
SEALANTS (SILICONE)	1 qt. (1 L)		
GEOTEXTILE FABRICS	At least 6.5 LF (1800 mm) across the entire width of the roll		DO NOT FOLD Geotextile Roll to Ship
FENCING:		AASHTO M280	
Barb Wire	6 LF (v)	ASTM A116	
Woven Wire	6 LF (2 m)	Spec. 708.13 (AASHTO M181)	
Chain Link	3 LF (1 m)	ASTM A116	
Hardware for Barbed or Woven Wire		ASTM A702 or AASHTO	
Metal Fence Posts		M281	
Tension Wire	3 LF (1 m)	AASHTO M181	

[1]Standard ITD Supply Inventory item.

[2]If Idaho T74 (vibrator compactor curve) is required, submit at least 100 lb. (50 kg) of material for minus 3/4" (19 mm) material and 150 lb. (70 kg) for minus 3" (75 mm) material.

SECTION 225.00 – TESTING QUALIFICATIONS

Testing and sampling should be done strictly in accordance with the specified procedures. Standard testing procedures have been developed by organizations such as AASHTO, ASTM, AWS (American Welding Society), WAQTC (Western Alliance for Quality Transportation Construction), and ITD.

Personnel who sample and test materials for ITD construction projects shall be WAQTC qualified for the WAQTC module involved. For areas not covered by WAQTC, qualification to the appropriate recognized standard is required. An example would be nondestructive testing related to welding inspection, which would be covered by qualification programs of the American Welding Society (AWS) and American Society for Nondestructive Testing (ASNT). The ITD District Materials engineer, with the assistance of the Materials Engineer if necessary, will verify and document the qualification of those not covered by a WAQTC module qualification. The Independent Assurance Inspector will evaluate and document the competency of personnel qualified through WAQTC modules according to the Independent Assurance Program. See Section 380.00.

SECTION 230.00 – ACCEPTANCE OF MATERIALS BY MANUFACTURER'S OR FABRICATOR'S CERTIFICATION

Standard Specification Subsection 106.04 allows the acceptance of certain materials based on certification provided by the manufacturer or fabricator. The certification must be complete and meet the criteria as outlined in this section and such additional criteria if specified in the project contract.

230.01 General Provisions. Standard ITD certification forms will be used. The standard forms are:

- ITD-914 Steel
- ITD-849 Geotextile and Geogrid
- ITD-851 Miscellaneous Items
- ITD-966 PG Asphalt Binder
- ITD-968 Cement / Fly Ash

The standard forms must be completed in their entirety and be signed by the manufacturer's representative who has quality control responsibility for the manufacture or fabrication of the material.

When required by the contract, QC test results must be attached to the specified ITD standard form.

Certification does not preclude inspection, sampling, testing or verification of certified test results of the material received on the project. Project inspectors will review all certification results for specification compliance prior to accepting the material. If the certified material is found to be outside acceptable specification limits the material is subject to rejection.

Each shipment of certified material should be visually inspected for obvious defects and handling and shipping damage. Damaged or defective material will be repaired to the satisfaction of the Engineer or rejected and replaced. Also, on items where it is feasible, simple measurements of specified properties should be spot checked at least once per project and recorded to verify certification. Examples would be length, mass per unit length, or thickness of steel items.

Acceptance of material by certification will be withdrawn when sample test or inspection results show the material consistently fails to meet specifications requirements. Reestablishment of the certification acceptance may be achieved through ITD pre-testing, pre-inspection and review of historical certification records and test results of the material prior to its incorporation into a project. Additionally, the manufacturer's quality control program may require revision and reevaluation by the Department.

230.02 Certification Program Procedures for Portland Cement and Fly Ash. Cement or fly ash manufacturers approved under the ITD Cement/Fly Ash Certification Program can supply cement and/or fly ash to ITD projects by certification. HQ Materials Section determines which manufacturing plants have met the requirements for the certification program.

To be approved under the program the Department will evaluate the following:

- A copy of manufacturer's current quality control program
- Historical certification records and copies of all test results
- Certified Mill Analysis test reports for material delivered to ITD projects
- Verification tests on ITD project submitted samples
- Other methods deemed necessary by the Department

Once approved under the ITD Certification Program the manufacturer must continue to provide certified test results for all material produced.

If a project sample indicates out-of-specification material based on ITD verification testing additional testing may be conducted to define the extent of the problem. Price reduction or item removal will be required when specified tolerances are exceeded. In the event of continual non-conformance the manufacturer will be removed from the certification program.

230.02.01 Portland Cement. ITD will accept Portland cement by certification only from those manufacturers approved by the ITD Cement / Fly Ash Certification Program. Cement from manufacturers not approved under the certification program requires pre-testing and pre-approval prior to use.

The concrete supplier furnishing Portland cement to any ITD project from a manufacturer approved under the ITD Certification Program must provide to the project inspector at the end of each week in which concrete is placed a completed form ITD-968, Concrete Supplier's Cement / Fly Ash Certificate with the cement bill of lading attached showing the mill analysis number.

Failure to submit the completed form with the appropriate signatures will result in material rejection.

The cement manufacturer must submit certified mill test reports to the HQ Materials for all cement produced. The cement manufacturer's certified mill test reports must include:

- Name of the cement manufacture company.
- Location of the cement mill.
- Cement Type
- Mill Analysis Number
- Manufacturer's bin or silo number from which cement was shipped
- Mill analysis test report date and production period.
- Mill analysis test results pertinent to Idaho specifications
- Certification statement indicating the cement meets all specification requirements pertinent to Idaho specifications.
- Signature, Title, and date by the cement company chemist or other authorized official.

The test result data will be monitored for compliance with the specifications and for the manufacturer to remain under the certification program.

Cement samples will be taken on the project in accordance with the Minimum Testing Requirements (Section 270.00). Samples will be approximately 1 gal. (4 L) in volume and shipped to the Central Laboratory in Boise in moisture-proof containers. A 6" x 12" (150 mm x 300 mm) concrete cylinder can may be used either with the lid securely taped shut or with a friction lid.

The manufacturing companies approved by the ITD Cement / Fly Ash Certification Program to furnish Portland Cement by certification can be found on the ITD Materials Section Intranet page or a list may be obtained from HQ Materials Section.

230.02.02 Fly Ash. ITD will accept fly ash by certification only from those manufacturers approved by the ITD Cement / Fly Ash Certification Program. Fly ash from manufacturers not approved under the certification program requires pre-testing and pre-approval prior to use.

The concrete supplier furnishing fly ash to any ITD project from a manufacturer approved under the ITD Certification Program must provide to the project inspector at the end of each week in which concrete is placed a completed form ITD-968, Concrete Supplier's Cement / Fly Ash Certificate with the fly ash bill of lading attached showing the Sample Identification Number.

Failure to submit the completed form with the appropriate signatures will result in material rejection.

The fly ash manufacturer must submit certified test reports to the HQ Materials for all fly ash produced. The fly ash source's certified laboratory test reports must include:

- Name of the fly ash source company
- Plant Origin.
- Sample Identification number
- Laboratory test report date and production period
- Laboratory test results pertinent to Idaho specifications
- Signature, title and date by the testing laboratory chemist or other authorized official

The test result data will be monitored for compliance with the specifications and for the fly ash source to remain under the certification program.

Fly ash samples will be taken on the project in accordance with the Minimum Testing Requirements (Section 270.00). Samples will be approximately 1 gal. (4 L) in volume and will be shipped to the Central Laboratory in Boise in moisture-proof containers. A 6" x 12" (150 mm x 300 mm) concrete cylinder can may be used, either with the lid securely taped shut or with a friction lid. These samples will be tested for chemical and physical parameters to monitor production characteristics and to verify the certification.

The fly ash sources approved to furnish fly ash under the certification procedure can be found on the ITD Materials Section Intranet page or a list may be obtained from the HQ Materials Section.

230.03 Steel. The steel fabricator must complete standard form ITD-914, Steel Certification, for each shipment of a steel product to a project. Certified mill test reports from the steel mill for all heats in the shipment must be attached to the ITD-914.

The certified mill test report shall include the following:

- Name and location of the rolling mill
- Consignee and/or destination of the shipment
- Specification
- Size
- Heat number
- Chemical analysis
- Physical tests
- Certificate number, order release number or shipment number, etc.
- Signature of authorized official
- Buy American certification

230.03.01 Steel Bridge Girders. HQ Materials will provide inspection during the fabrication of steel bridge girders. The district must contact HQ Materials as soon as the fabricator is known so the inspection can be scheduled. The inspection may be contracted to an independent company when the fabrication is out-of-state.

HQ Materials will obtain the required certifications, including form ITD-914, Steel Certification, during the fabrication of the steel girders.

HQ Materials will notify the Resident/Regional Engineer by departmental memorandum when the fabrication of the girders is satisfactorily complete and accepted for delivery to the project. Copies of the inspection and certification reports will be forwarded to the Resident/Regional Engineer for the project files.

Project personnel should contact HQ Materials prior to final erection of the steel girders to schedule an in-place inspection including, paint, bolting, fabrication tolerances, and field welding.

230.03.02 Metal Reinforcement. The metal reinforcement (reinforcing steel or rebar) supplier must submit the ITD-914 and the certified mill test reports with each shipment of bars delivered to a project worksite (See Section 230.03).

Metal reinforcement (reinforcing steel or rebar) is sampled in the field by ITD personnel from shipments delivered to the project. A sample is defined as two (2) 36 inch pieces of steel cut from materials delivered to the project of the same size and heat number. ITD Inspectors must witness or perform the sampling at the jobsite.

See Standard Specification Section 503.

The two (2) bars which replace the field samples, if from a different heat number, will not require sampling. It is not necessary to resample any bars from a heat number that has previously been tested for the project.

In the event the same heat number is used for a long bar and a shorter bar, the shorter bar will be used for the sample to minimize the cost for the replacement bar.

Some fabricated bent bars may not have a 36 in. (900 mm) length for sampling, however, the sample bars should be submitted and the Central Laboratory will determine if a test specimen can be obtained.

Sampling of bar comprising spirals will be taken from the extra length of the spiral as required by the specifications. No cutting that would require splicing to obtain samples will be permitted.

In the event of a specialized non-standard length or size bar, the Central Laboratory should be consulted for the correct sampling technique.

Samples will be promptly shipped or delivered to the Central Materials Lab within two (2) working days for testing. UPS or FedEx next day shipping is recommended when necessary. Tests will be performed to detect non-specification steel for replacement prior to incorporation into the structure. Samples must be properly tagged and accompanied by the ITD-914, ITD-1044, and the Mill Certifications

When epoxy-coated steel is specified, the coater must mark the portion of the ITD-914, Steel Certification, referring to the epoxy-coating or provide a certification statement that the coating complies with AASHTO M-284. Copies of holiday tests and coating thickness tests representing the shipment will be included. An occasional check of coating thickness will be made on the sample bars at the time of laboratory testing using a dry film paint thickness gauge.

Epoxy-coated steel is to be visually inspected for coating damage upon delivery to the project, using criteria of AASHTO M-284. It is especially important to check the outside of bends for cracking, de-bonding and rust.

230.04 Concrete Pipe Products. Concrete pipe or related products (catch basins, manhole section, elbows, etc.) delivered to an ITD project will be accompanied by form ITD-851, Miscellaneous Items, completed by the manufacturer certifying that all material furnished was manufactured in accordance with the specifications set forth in the contract. All quantities and sizes included under the certification for that project shall be listed on the form ITD-851. For products specified to meet Standard Specification Subsection 502 Concrete, quality control test results, as required by the specifications, will be attached to the ITD-851.

All manufacturers furnishing concrete pipe are required to carry out tests for strength, absorption and hydrostatic pressure as indicated in the AASHTO or ASTM specification. The state may inspect or observe operations at the manufacturer's yard, including the manufacturer's quality control testing records.

230.05 Concrete Guardrail and Other Pre-cast Concrete Products. Concrete Guardrail and other pre-cast concrete products are required by the specifications to meet Standard Specification Section 502. Standard Form ITD-851, Miscellaneous Items, will be completed by the manufacturer and all materials used will be listed. Attached to the ITD-851 will be copies of the manufacturer's quality control test results as required by the specifications and mill test reports for steel, strand or hardware incorporated.

230.06 Concrete with Specified Strength 3000 psi (20.5 MPa) or Less (Including Seal Concrete). When 3000 psi (20.5 MPa) or less concrete is specified, the concrete may be accepted by certification if produced using a qualified aggregate source. Section 265.02 explains the requirements for qualification of aggregate sources. The concrete mix design must be submitted for review.

The producer shall furnish a completed form ITD-875 with the class and concrete mix design designation listed, as well as project placement locations, on the form.

The specifications require the producer or contractor to perform quality control field tests and compressive strength tests for concrete placed on the project. The test results must be attached to the ITD-875 certification.

230.07 Corrugated Metal Pipe and Corrugated Plate Pipe. The supplier will furnish a completed certification form ITD-914, Steel Certification, covering the quantity of CMP shipped to the project. The ITD form will be accompanied by mill test reports from the pipe manufacturer for all heats of steel involved and certification from the galvanizer indicating the coating complies with the applicable specification. The appropriate AASHTO or ASTM specifications must be referenced on the form.

Visual inspection is required at the job site to check for obvious defects, including damage in handling and shipping. Coated or bare galvanized pipe must always be checked for damage or visible gaps in the protective layers.

Each CMP supplier will provide spelter samples to the ITD Central Laboratory for all heat numbers processed. The ITD laboratory will randomly test at least ten (10) spelter samples per year to verify the spelter coating process. The list of test results, including the accompanying heat numbers, are available on the ITD HQ Materials Section intranet page or a list can be obtained from HQ Materials Section.

Bituminous coating must be verified by field inspection.

230.08 Plastic Pipe. The supplier will furnish a completed certification form ITD-851, Miscellaneous Items, from the pipe manufacturer, citing appropriate AASHTO or ASTM specifications in accordance with the contract. Final acceptance is subject to visual inspection for damage in shipping or handling or other obvious defects.

230.09 Geotextiles and Geogrids. The contractor shall furnish to the Project Inspector the geotextile manufacturer's certified test results attached to the completed form ITD-849, Geotextile & Geogrid, covering the quantity furnished to the project.

The certification form will be in accordance with Standard Specification Subsection 718.02 for geotextiles and in accordance with the contract special provisions for geogrid:

- Sampling by ITD will be in accordance with Standard Specification Subsection 718.03 for geotextiles and the contract special provisions for geogrid. (See also Section 270.60, MTR Section 640).
- The certification form ITD-849 must include the product name or style or product code number.

230.10 Performance Graded Asphalt Binder. Reference Section 255.00 for complete information on performance graded asphalt binder.

Form ITD-966, Asphalt Binder Supplier's Certificate, must be completed and submitted to the Engineer for each week asphalt binder is supplied to an Idaho project. The supplier must attach to the form:

- The Quality Control test results representing the same production lots as asphalt binder shipped to the project.
- The bill of lading indicating production lots shipped to the contractor.

Sampling and testing will be performed as described in Section 255.00.

Anti-strip additives must be pre-approved for use. HQ Materials maintains the approved list which is available through the ITD Intranet. A list may also be obtained from HQ Materials Section.

230.11 Liquid or Emulsified Asphalt. A supplier's bill of lading will be furnished to the inspector with each load of liquid asphalt or emulsion supplied to the project. The bill of lading must contain the following information:

- Date of delivery, project number, key number, county, bill of lading number, and name of customer.
- Product identification, tonnage, truck/trailer number, any QC tests performed on asphalt product, and Certificate of Compliance.
- Supplier's name and address, phone number, and signature.

ITD project inspectors will sample only undiluted asphalt for verification testing following the frequency according to the individual bid schedule items in Minimum Testing Requirements (Section 270.00).

ITD project inspectors will perform field viscosity testing when required by the Minimum Testing Requirements in Section 270.00 from the truck or distributor at a location as close to the project as practical or on the project site.

230.12 Miscellaneous Items Accepted by Certification. Certification of miscellaneous materials is acceptable as defined in this section.

230.12.01 General Provisions. In addition to the materials discussed individually in Section 230.00, the following miscellaneous items may also be accepted on the basis of the manufacturer's or fabricator's (not the supplier unless the supplier is also the manufacturer) certification, using form ITD-851 and signed by the manufacturer's representative who has quality control responsibility, that the material was manufactured in accordance with and meets specification requirements. Each certification must detail the quantity of material furnished to the project under that certification. Laboratory test reports will also be furnished where applicable (steel mill test reports, wood preservative treatment reports, for example).

230.12.02 List of Miscellaneous Materials Accepted on the Basis of the Manufacturer's or Fabricator's Certification. Table 230.1 lists miscellaneous items that may be accepted by certification. The manufacturer's or fabricator's certification will not preclude the sampling and testing of the material or its final acceptance or rejection on the basis of the test results. Project samples are to be taken, as indicated in the Minimum Testing Requirements (Section 270.00) for verification testing. Samples may also be taken and tested at the option of the Materials Engineer or Resident/Regional Engineer.

Visual inspection for obvious defects and handling and shipping damage should always be done. Also, on items where it is feasible, simple measurements of specified properties should be spot checked at least once per project and recorded to verify certification. Examples would be length, mass per unit length, or thickness of steel items.

Table 230.1 Miscellaneous Materials Accepted by Certification

Material	Standard Specification Subsection
Bearing Pads and Plates	507
Brick and Blocks, Masonry	Miscellaneous
Bridge Rail, Metal	504
Concrete, Rapid Set	Special Contract Provision
Delineators and Mileposts	617
Dowel Bars and Tie Bars for Concrete Pavement	409, 503, 510, 609, 611
Dust Oil	Miscellaneous
Electrical	Miscellaneous
Epoxies	Miscellaneous
Epoxy Patch	Miscellaneous
Guard Rail and Posts	612
H-Beam Piles	505
Illumination Poles and Bases	619
Joint Sealants and Sealers	409, 502, 625
Paint (only small quantities less than 25 gallons (100L))	504, 505, 627
Sewers (Storm and Sanitary)	605
Signs and Posts	616
Steel Shell Piling	505
Structural Bolts	504
Timber (Structural)	609, 612, 616
Traffic Signal Poles and Mast Arms	656

SECTION 240.00 – PRE-TESTED AND PRE-APPROVED MATERIALS

Certain materials as designated below are accepted based on pre-tests or pre-approvals by the HQ Materials Section.

240.01 Pre-tested Materials. The following materials require pre-testing prior to use on a project.

- Traffic Line Paint
- Glass Beads
- Curing Compound

The HQ Materials Section maintains an electronic list of approved pre-tested materials/products. The list is found on the ITD Materials Section Intranet page or a list may be obtained from HQ Materials Section. The ITD project personnel must verify the material/product is approved prior to use on a project.

240.01.01 Bulk Material/Products Sampled at the Manufacturing Plant. A major portion of the pre-tested products is sampled at the manufacturer's plant for bulk production. The HQ Materials Section is responsible for obtaining the samples at the plants and testing such material.

Those materials/products deemed acceptable will appear on the pre-approved list found on the ITD Materials Section Intranet page or a list may be obtained from HQ Materials Section.

240.01.02 Materials/ Products Sampled at the Project. ITD project personnel must obtain samples, or at least witness the sampling, at the project site when the lot/batch of traffic line paint, glass beads, or curing compound is not shown as pre-tested or pre-approved.

The samples will be obtained from the material delivered to the project and sent to the ITD Central Laboratory for testing. Allow 30 days for the testing. The testing must be accomplished prior to use of the material/product on a project. The sample must be properly identified with date sampled, sampler's name, the product & manufacturer, and the lot or batch number.

240.02 Pre-approved Materials. The HQ Materials Section maintains an electronic list of pre-approved materials. The list is found on the ITD Materials Section Intranet page or a list may be obtained from HQ Materials Section. The following materials require pre-approval prior to use on a project.

- Anti-strip additives for plant mix pavement
- Concrete Admixtures

The ITD project personnel must verify the material/product is approved prior to use on a project.